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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,736	01/22/2001	Edward J. Bortolini	Bortolini	1298
24283	7590	05/20/2005	EXAMINER	
PATTON BOGGS 1660 LINCOLN ST SUITE 2050 DENVER, CO 80264			RAMAN, USHA	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/766,736	BORTOLINI ET AL.
Examiner	Art Unit	
Usha Raman	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 02 November 2004.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-10 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    Paper No(s)/Mail Date. \_\_\_\_\_.  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_                    5) Notice of Informal Patent Application (PTO-152)  
 \_\_\_\_\_                    6) Other: \_\_\_\_\_.

## DETAILED OFFICE ACTION

### ***Response to Arguments***

1. Applicant's arguments filed November 2<sup>nd</sup> 2004 have been fully considered but they are not persuasive. Applicant argues that the prior art system used in the rejection "requires the use of a single cable modem termination which incorporates both segments: downstream and upstream functions in a single device" and therefore overcomes independent claims 1 and 6. The examiner however respectfully disagrees. The structure of the hierarchical split broadband cable termination system comprising separate and independently operable upstream and downstream functions is not reflected in the recited claims. As a result, the examiner maintains rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
3. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by applicant's prior art system.

In regards to claims 1 and 6, applicant's admitted prior art system (in figures 1 and 2) discloses a broadband cable modem termination system for managing data transmission through a broadband network that interconnects a plurality of end user locations and a head end (111, 113) via a cable modem

(CMTS 105, 106 located in hubs 121-125. See applicant's disclosure, page 4, lines 19-20) that has an upstream component for multipoint end user to single point head end upstream signaling (CMTS 106 in hub 124 receives upstream data from users coupled to passive nodes 147, 148, 149, therefore comprises multipoint end user to single point headend signaling means) and a downstream component for single point head end to multipoint end user downstream signaling (CMTS in hub 125 transmits downstream data signaling from master headend 112 to plurality of passive fiber nodes 147, 148, 149, and therefore comprises signal point headend to multipoint end user signaling means), the broadband network comprising a hierarchical network having at least two levels, the system further comprising

Downstream broadband cable modem component (CMTS in hub 125) means located at a "first" level of said hierarchical network for transmitting data in a downstream direction from a source of program material at said head end (113) to selected ones of plurality of end user locations.

Upstream broadband cable modem component means (CMTS in hub 124) located at a "second" level of hierarchical network for transmitting control data received from at least one of said plurality of end user locations in an upstream direction to said head-end (through upstream DOCSIS channels), wherein second level is located downstream of said first level in said hierarchical network (hub 124 is located downstream of hub 125).

In regards to claims 2, and 7, data in digital baseband IP format is transmitted downstream from the CMTS to the end user locations are transmitted over existing RF channels. Therefore, the data received at the CMTS in digital baseband IP format is inherently converted in a RF based format for transmission over RF channels to a plurality of end user locations. Note figure 1, and descriptions in page 4, lines 15-19 and page 5, lines 5-10 of the disclosure.

In regards to claims 3, 5, 8 and 10, the RF channels are located downstream of the CMTS, therefore upstream data received upstream at the CMTS from the end user locations are received in radio frequency based format and converted in digital baseband IP format for transmission to head end as indicated in figure 1.

In regards to claims 4, and 9, hubs 124 and 125 each comprise a CMTS and therefore the downstream broadband cable modem component (hub 125) and the upstream broadband cable component (hub 124) operate independent of each other.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

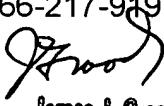
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is

filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on (571) 272-7950. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
James J. Groody  
Supervisory Patent Examiner  
Art Unit 2616